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| 10/614,731 | 07/03/2003 | Gerald A. Hutchinson | APTPEP1.048A | 7527 |

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| EXAMINER |
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LIGHTFOOT, ELENA TSOY

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| ART UNIT | PAPER NUMBER |
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1792

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02/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
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| Office Action Summary | Application No. 10/614,731 | Applicant(s) HUTCHINSON ET AL. | |
| | Examiner Elena Tsoy Lightfoot | Art Unit 1792 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-19, 52, 53, 57-63 and 65-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-19, 52, 53, 57-63 and 65-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 1, 1008 has been entered.

Response to Amendment

Amendment filed on October 1, 2008 has been entered. Claims 1-14, 16-19, 52, 53, 57-63, and 65-95 are pending in the application.

Claim Objections

1. Claims 10-11 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 10 and 11 recite the source comprising infrared and forced air. However, claim 1, on which claims 10-11 depend, does not recite forced air. Note that irradiation source may include only ray or heat *emitting* sources not forced air.
2. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 recites, "wherein said solution or dispersion of the thermoplastic epoxy resin comprises organic acid salts made from the reaction of polyhydroxyaminoethers with *phosphoric acid*, lactic acid, malic acid, citric acid, acetic acid, glycolic acid and/or mixtures thereof". However, claim 1, on which claim 18 depends, recites phosphoric acid *only*.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-9, 12, 14, 16-18, 52, 53, 57-60, 62, 63 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 31-38 of U.S. Patent No. 6,676,883 in view of Dworak et al (US 6,350,796), further in view of Geist et al (US 4762903) for the reasons of record set forth in paragraph 4 of the Office Action mailed on 4/1/2008 because the current amendment did not change the scope of invention.

5. Claims 68-71, 74, 75, and 77 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 31-38 of U.S. Patent No. 6,676,883 in view of Dworak et al, further in view of Geist et al, and further in view of Mallya et al (US 6489387) for the reasons of record set forth in paragraph 14 of the Office Action mailed on 8/8/2007.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-12, 14, 16-19, 52-53, 57-63, and 65-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi (US 4,393,106) in view of Farha (US 5,472,753), further in view of Noda (US 6,872,802), further in view of Dworak et al, and further in view of Geist et al (US 4,762,903) for the reasons of record set forth in paragraph 7 of the Office Action mailed on 4/1/2008 because the current amendment did not change the scope of invention.
8. Claims 1-12, 14, 16-19, 52-53, 57-63, and 65-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi (US 4,393,106) in view of Farha (US 5,472,753), further in view of Noda (US 6,872,802), and further in view of Geist et al for the reasons of record set forth in paragraph 8 of the Office Action mailed on 4/1/2008 because the current amendment did not change the scope of invention.
9. Claims 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Dworak et al, and further in view of Geist et al, and further in view of Cobbs, Jr et al (US 4,573,429) for the reasons of record set forth in paragraph 17 of the Office Action mailed on 8/8/2007.
10. Claims 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, and further in view of Geist et al, and further in view of Cobbs, Jr et al (US 4,573,429) for the reasons of record set forth in paragraph 17 of the Office Action mailed on 8/8/2007.
11. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Dworak et al, and further in view of Geist et al, and further in view of Miyake et al (US 5,079,034) for the reasons of record set forth in paragraph 18 of the Office Action mailed on 8/8/2007.
12. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, and further in view of Geist et al, and further in view of Miyake et al (US 5,079,034) for the reasons of record set forth in paragraph 18 of the Office Action mailed on 8/8/2007.

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13. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Dworak et al and further in view of Geist et al, and further in view of Kennedy (US 4,505,951) for the reasons of record set forth in paragraph 19 of the Office Action mailed on 8/8/2007.

14. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Geist et al, and further in view of Kennedy (US 4,505,951) for the reasons of record set forth in paragraph 19 of the Office Action mailed on 8/8/2007.

15. Claims 80-88, 90-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Dworak et al, and further in view of Geist et al, further in view of Kennedy, and further in view of Cobbs, Jr et al for the reasons of record set forth in paragraph 20 of the Office Action mailed on 8/8/2007.

16. Claims 80-88, 90-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, and further in view of Geist et al, further in view of Kennedy, and further in view of Cobbs, Jr et al for the reasons of record set forth in paragraph 20 of the Office Action mailed on 8/8/2007.

17. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Dworak et al, and further in view of Geist et al, further in view of Kennedy, further in view of Cobbs, Jr et al, and further in view of Fagerburg et al (US 4499262) for the reasons of record set forth in paragraph 21 of the Office Action mailed on 8/8/2007.

18. Claim 89 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruhashi et al in view of Farha, further in view of Noda, further in view of Geist et al, further in view of Kennedy, further in view of Cobbs, Jr et al, and further in view of Fagerburg et al (US 4499262) for the reasons of record set forth in paragraph 21 of the Office Action mailed on 8/8/2007.

Response to Arguments

Applicants' arguments filed October 1, 2008 have been fully considered but they are not persuasive.

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Criticality of the use of phosphoric acid is not shown

Applicants argue that while a person of ordinary skill in the art may have used phosphoric acid in the cited art with the expectation of providing water-dilutability of amino epoxy resins as taught by Geist, nothing in the cited prior art would lead a person of ordinary skill in the art to have selected phosphoric acid in particular, as recited in the claims. Applicant has unexpectedly discovered that gas barrier properties are remarkably increased through the use of this acid in particular. These findings demonstrate that the increased gas barrier properties resulting from the use of phosphoric acid in combination with the cited art would not have been predictable or expected. Applicant thus asserts that independent Claims 1 and 52 are non-obvious over the cited references.

The Examiner respectfully disagrees with this argument. First of all, Applicants' assertion that the use of phosphoric acid achieves *unexpected* results is a **pure allegation**. The specification provides NO *experimental* data showing criticality of the use of phosphoric acid. Secondly, **the criticality** of phosphoric acid is *mere allegation* not supported by *factual evidence* of criticality or unexpected results timely presented with Affidavits or Declarations. The arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965). See MPEP 716.01(a)-(c).

Third, the Applicants' specification discloses in P103 and 105, "A PHAE solution/dispersion may be prepared by stirring or otherwise agitating the PHAE in a solution of water with an organic acid, **preferably acetic** or phosphoric acid, but also including lactic, malic, citric, or glycolic acid and/or mixtures thereof. These PHAE solution/dispersions also include organic acid salts produced by the reaction of the polyhydroxyaminoethers with these acids". Even Applicants' claim 18 recites **phosphoric acid** among other organic acids such as **lactic acid**, malic acid, citric acid, **acetic acid**, glycolic acid and/or mixtures thereof may be used for neutralizing PHAE. Thus, according to Applicants' own specification and claims, phosphoric acid is not better than other acids, e.g. *acetic acid*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy Lightfoot whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Lightfoot, Ph.D.
Primary Examiner
Art Unit 1792

February 6, 2009

/Elena Tsoy Lightfoot/